



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,298	06/27/2003	Cesar A. Galindo-Legaria	MSFT-1795 (303912.01)	9011

41505 7590 01/19/2007
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER

THAI, HANH B

ART UNIT PAPER NUMBER

2163

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/608,298

Applicant(s)

GALINDO-LEGARIA ET AL.

Examiner

Hanh B. Thai

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 10/26/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a Non-final Office Action in response to the communication received on October 26, 2006. Claims 1-26 are pending in this application.

Drawings

2. The drawings were received on 6/27/03. These drawings are accepted.

Response to Arguments

3. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Shrivastava et al. (US Pub. 2004/0243576 A1).

Regarding claims 1 and 10, Shrivastava discloses a method for providing notifications of changes in a database system comprising:

- creating a subscription template (abstract; ¶[0011]; [0185]-[0186] , Shrivastava);
- parameterizing the subscription template to generate a parameter table (abstract; ¶[0011]; [0185]-[0186] , Shrivastava discloses “catalog tables” and “SQL statement”

Art Unit: 2163

corresponding to the claimed “parameter table” and “subscription template” respectively); and

- performing a join between parameter table and parameterized subscription template to generate a query (abstract; ¶[0011]; [0185]-[0186] , Shrivastava discloses the performance of a join operation to produce the query results reads on the claimed “a join between parameter table and parameterized subscription template to generate a query”).

Regarding claim 2, Shrivastava discloses executing an action upon performing the join, wherein the action comprises any of: performing a query and communicating data from the database system to cooperating computing applications (abstract; ¶[0011]; [0185]-[0186] , Shrivastava).

Regarding claim 3, Shrivastava discloses executing the query (abstract; ¶[0011]; [0185]-[0186] , Shrivastava).

Regarding claim 4, Shrivastava discloses retrieving data from the database system (abstract; ¶[0011]; [0185]-[0186] , Shrivastava).

Regarding claim 5, Shrivastava discloses communicating the data retrieved from the database system to cooperating services and/or computing applications (abstract; ¶[0011]; [0185]-[0186] , Shrivastava).

Regarding claim 6, Shrivastava discloses storing a subscription identification value (abstract; ¶[0011]; [0176]; [0185]-[0186] , Shrivastava).

Regarding claim 7, Shrivastava discloses associating the subscription identification value with a subscriber (¶[0011]; [0176]-[0186] , Shrivastava).

Art Unit: 2163

Regarding claim 8, Shrivastava discloses providing notifications to subscribers ([0176]-[0184] , Shrivastava).

Regarding claim 9, Shrivastava discloses adding additional parameters to the parameter table, wherein the additional parameters are not based on the created subscription template ([0011]; [0176]-[0186] , Shrivastava).

Regarding claim 11, Shrivastava discloses a system to increase subscription scalability in an electronic database environment comprising:

- a database system (“database”, [0045]; [0059] [0062] , Shrivastava), the database system capable of accepting and processing subscriptions by cooperating services and/or computing applications, the subscriptions offering query templates for execution on database system to retrieve desired data ([0011]; [0176]-[0186] , Shrivastava);
- a notification manger (“particular manager” that sends emails to all users, [0184]), the notification manager operating on the database system to identify changes in data in the database system and to provide notifications to the cooperating services and/or computing applications of database system changes ([0176]-[0186] , Shrivastava).
- an optimization module, the optimization module using queries originating from subscribers to create subscription templates (abstract; [0011]; [0185]-[0186] , Shrivastava) which are parameterized to create a parameter table (abstract; [0011]; [0185]-[0186] , Shrivastava discloses “catalog tables” and “SQL statement” corresponding to the claimed “parameter table” and “subscription template” respectively), wherein the parameter table is joined with the subscription template to

Art Unit: 2163

generate a notification query (abstract; ¶[0011]; [0185]-[0186] , Shrivastava discloses the performance of a join operation to produce the query results reads on the claimed “the parameter table is joined with the subscription template to generate a notification query”).

Regarding claim 12, Shrivastava discloses the optimization module comprises a computing application (abstract; ¶[0011]; [0185]-[0186] , Shrivastava).

Regarding claim 13, Shrivastava discloses a communication means, the communication means for use in communicating data between the database system and the cooperating services and/or computing applications (abstract; ¶[0011]; [0185]-[0186] , Shrivastava).

Regarding claim 14, Shrivastava discloses a spool, the spool used to spool subscription queries (abstract; ¶[0011]; [0185]-[0186] , Shrivastava).

Regarding claim 15, Shrivastava discloses a filter, the filter used to filter out subscription queries (¶[0077]-[0079] and [0083] , Shrivastava).

Regarding claim 16, Shrivastava discloses an execution module, the execution module executing the notification query on the database system ([0176]-[0184] , Shrivastava).

Regarding claim 17, Shrivastava discloses the notification manager and the database system reside in the same data environment ([0176]-[0184] , Shrivastava).

Regarding claim 18, Shrivastava discloses the notification manager, the database system, and the optimization module reside in the same environment ([0176]-[0184] , Shrivastava).

Regarding claim 19, Shrivastava discloses wherein the parameter tables comprise any of query constants, subscriber identification information, and subscriber routing information ([0176]-[0184] , Shrivastava).

Art Unit: 2163

Regarding claims 20 and 26, Shrivastava discloses a method for increasing subscription scalability in electronic data environments comprising:

- accepting subscriptions from cooperating services and/or computing applications by a database system; processing the subscriptions to generate query templates, the query templates having queries (§[0011]; [0176]-[0186] , Shrivastava);
- parameterizing the query templates to generate a parameter table (abstract; §[0011]; [0185]-[0186] , Shrivastava discloses “catalog tables” and “SQL statement” corresponding to the claimed “parameter table” and “subscription template” respectively); and
- joining the parameter table with the query templates to generate a notification query (abstract; §[0011]; [0185]-[0186] , Shrivastava discloses the performance of a join operation to produce the query results reads on the claimed “joining the parameter table with the query template to generate a notification query”).

Regarding claim 21, Shrivastava discloses spooling the query templates (abstract §[0011]; [0185]-[0186] , Shrivastava).

Regarding claim 22, Shrivastava discloses filtering the query templates (§[0077]-[0079] and [0083] , Shrivastava).

Regarding claim 23, Shrivastava discloses executing the notification query ([0176]-[0184] , Shrivastava).

Regarding claim 24, Shrivastava discloses the results of the notification query to the cooperating services and/or computing applications ([0176]-[0184] , Shrivastava).

Art Unit: 2163

Regarding claim 25, Shrivastava discloses adding parameters to the parameter table not originating from the query templates (§ [0046]-[0049] and [0054], Shrivastava).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

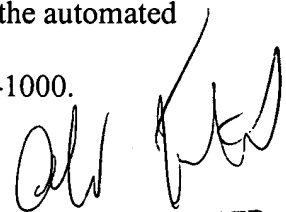
On Au et al. (US 6,505,189 B1) disclose aggregate join index for relational databases.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh B. Thai whose telephone number is 571-272-4029. The examiner can normally be reached on 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hanh B Thai
Examiner
Art Unit 2163


ALFORD KINDRED
PRIMARY EXAMINER

Application/Control Number: 10/608,298

Page 8

Art Unit: 2163

January 4, 2007